Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A method of packet assembly in a wireless transmission system, comprising the steps of:

    sampling at least first and second packets of a plurality of packets;

    calculating ~~respective~~ corresponding throughput times for each of said first and second packets; and

    consolidating said first and second packets into a third packet if the sum of said corresponding throughput times exceeds a predetermined limit.

2. (Original): The method of Claim 1, wherein said plurality of packets in the sampling step conform to an IEEE 802.11 standard.

3. (Original): The method of Claim 1, wherein said predetermined limit is a throughput time of said third packet in the consolidating step.

4. (Currently Amended): The method of Claim 1, wherein ~~said~~ a throughput time of said third packet is less than the sum of said ~~combined~~ corresponding throughput times of said first and second packets.

5. (Currently Amended): The method of Claim 1, wherein said corresponding throughput times includes an assembly time and a disassembly time of said packet.

6. (Currently Amended): The method of Claim 1, wherein said corresponding throughput times includes a data packet time, a [[SIFS]]Short InterFrame Space time, a [[DIFS]] Distributed InterFrame Space time, and an average back-off time of said corresponding packet.

7. (Original): The method of Claim 1, wherein the step of consolidating is performed in an ad hoc network topology

8. (Original): The method of Claim 1, wherein the step of consolidating is performed in an infrastructure network topology.

9. (Original): The method of Claim 1, wherein more than two packets are sampled in the step of sampling and consolidated into a consolidated packet in the step of consolidating when the sum of said corresponding throughput times exceeds said predetermined limit.

10. (Currently Amended): A packet assembly apparatus in a wireless transmission system, comprising:

    a sampler for sampling at least first and second packets of a plurality of packets; and

    a processor for calculating ~~respective~~ corresponding throughput times for each of said first and second packets;

    wherein a third packet is generated by consolidating said first and second packets if the sum of said corresponding throughput times exceeds a predetermined limit.

11. (Original): The apparatus of Claim 10, wherein said plurality of packets conform to an IEEE 802.11 standard.

12. (Original): The apparatus of Claim 10, wherein said predetermined limit is a throughput time of said third packet.

13. (Currently Amended): The apparatus of Claim 10, wherein ~~said~~ a throughput time of said third packet is less than the sum of said ~~combined~~ corresponding throughput times of said first and second packets.

14. (Currently Amended): The apparatus of Claim 10, wherein said corresponding throughput times includes an assembly time and a disassembly time of said packet.

15. (Currently Amended): The apparatus of Claim 10, wherein said corresponding throughput time includes a data packet time, a [[SIFS]] Short InterFrame Space time, a [[DIFS]] Distributed InterFrame Space time, and an average back-off time of said corresponding packet.

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16. (Original): The apparatus of Claim 10, wherein consolidation of said first and second packets is performed in an ad hoc network topology.

17. (Original): The apparatus of Claim 10, wherein consolidation of said first and second packets is performed in an infrastructure network topology.

18. (Original): The apparatus of Claim 10, wherein more than two packets are sampled by said sampler and consolidated into a consolidated packet when the sum of said corresponding throughput times exceeds said predetermined limit.